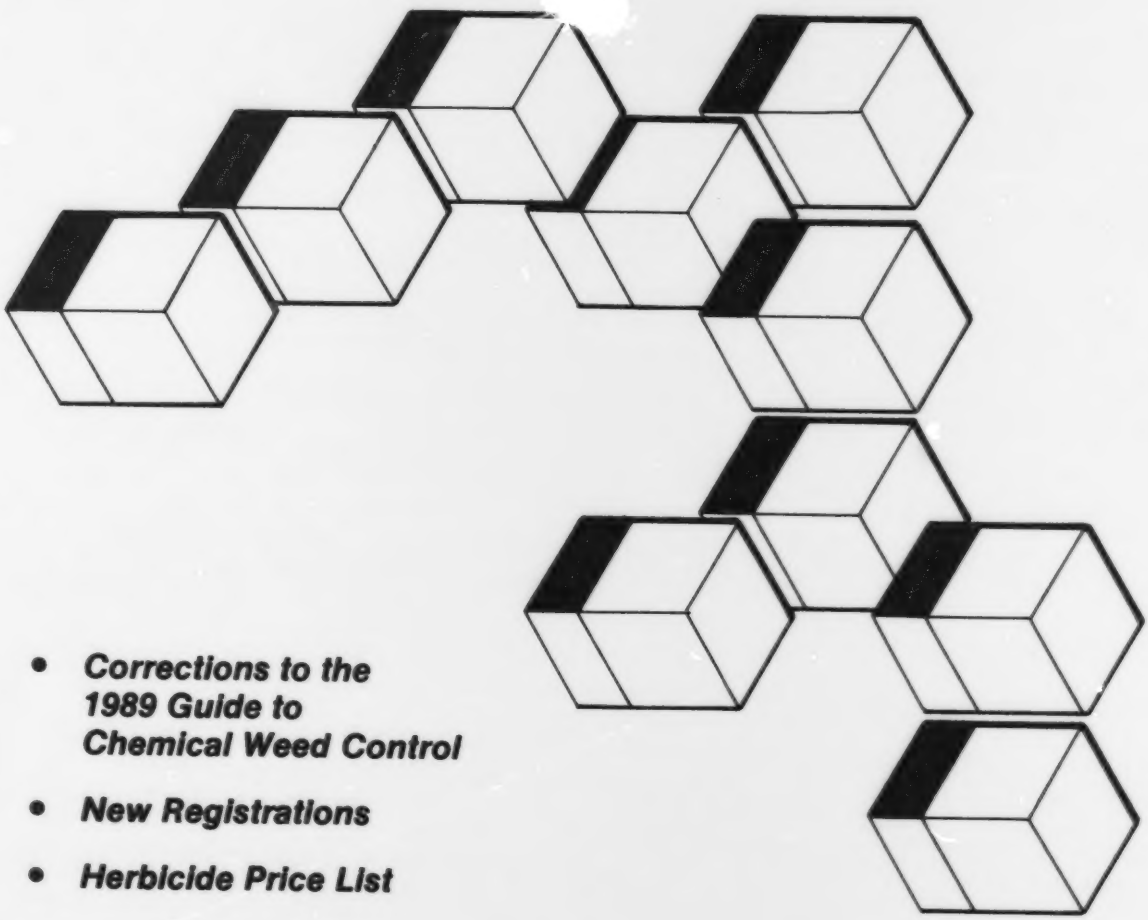
Agdex 641

Addendum to the *1989 Guide to Chemical Weed Control*



- ***Corrections to the 1989 Guide to Chemical Weed Control***
- ***New Registrations***
- ***Herbicide Price List***

Manitoba Agriculture

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FOREWORD

The Addendum contains corrections to the 1989 Guide to Chemical Weed Control. Also updated recommendations based on changes to herbicide registrations or new registrations approved since the 1989 Guide to Chemical Weed Control was printed. Use this Addendum as a supplement to the 1989 Guide to Chemical Weed Control.

ADDENDUM TO THE 1989 GUIDE TO

CHEMICAL WEED CONTROL

CORRECTIONS TO THE 1989 GUIDE TO CHEMICAL WEED CONTROL

1. Page 15 - Banvel (480 g/L) Recommendation

   Rate should be 0.093 L/acre - not 0.93 as printed.
   The higher rate will result in severe crop damage.

2. Page 36 - Table 5 Summary of Wheat Recommendations

   The table indicates a G under wild oats for Buctril M/Sabre.
   The G should be removed as Buctril M/Sabre will not control
   wild oats.

3. Page 109 - Sencor 500 (500 g/L) Sencor 75DF (75%) Recommendation

   Rate should be Sencor 500 at 0.172 L/acre and not 0.172 kg/acre.

4. Page 119 - Sunflower Recommendations

   Edge appears in Table 15 but not in text. The following
   recommendations should be used:

EDGE DF (50%)

APPLICATION TIMING:

a) Crop Stage: preplant incorporated (spring only).
b) Weed Stage: preemergence.

RATES

SOIL TYPE	RATE
Light textured soils (sands and sandy loams) 2-6% organic matter	0.65 kg/acre
Medium to heavy textured soils 2-4% organic matter	0.65 kg/acre
Medium to heavy textured soils 4-15% organic matter	0.89 kg/acre

Although registered for fall application, this use is not recommended as application and incorporation requirements predispose soils to erosion.

WATER VOLUME: 45 L/acre

PRESSURE: 275 kPa (40 psi)

NOZZLES: Flat fan nozzles with 50-mesh filters and screens.

MIXING: Use only sprayers equipped with jet or perforation pipe agitation. Return line agitation is not sufficient to keep this product in suspension. Fill the tank half full with water and begin agitation. Add half the required amount of Edge very slowly. Continue filling the tank with water gradually adding the remaining amount of Edge DF. Continue vigorous agitation at all times. Avoid adding Edge DF over the sump opening as filter plugging may occur.

INCORPORATION: Requires two incorporations at right angles for thorough mixing. The first incorporation must be done with 24 hours of spraying. The second incorporation may be performed at any time prior to seeding. See Herbicide Information section in the 1989 Guide to Chemical Weed Control.

TANK MIXES

Herbicides: None
Fertilizer: May be mixed with a liquid fertilizer. Conduct a compatibility test before mixing. May be impregnated onto dry bulk fertilizers. See Herbicide Information section in the 1989 Guide to Chemical Weed Control for details on mixing and spreading.
Insecticides: None.

RESTRICTIONS

Rainfall: No effect once incorporated.
Grazing: Do not graze or harvest as forage prior to crop maturity.
Recropping: Soil residues may affect subsequent crops. See Table 24 in the Guide for a list of susceptible crops.
Storage: Store in a cool, dry place. May be frozen.

ENVIRONMENTAL PRECAUTIONS: Poor results can be expected if dry soil conditions prevail between application time and weed emergence.

COMMENTS: Trifluralin tolerant foxtail populations have developed on a small number of fields, primarily in southwestern Manitoba. Preliminary data suggests this foxtail may also exhibit some tolerance to Edge. Should escapes occur following Edge application use a postemergent herbicide to control foxtail to prevent tolerant populations from developing, or increasing. Further research to examine trifuralin tolerant foxtail and its responses to herbicides such as Edge will be conducted in 1989.

5. Page 172 - In the Reglone recommendation under dessication of Lentils the rate of Agral 90 should read 1 L per 1000 L spray solution not 1 L per 100 L.

6. Page 179 - Rival, Rival 10G, Treflan EC, Treflan QR5 Triflurex Recommendation

   APPLICATION ON GRANULAR FERTILIZER

   To apply on dry bulk fertilizer, commercial blending is recommended. Treflan EC should be sprayed onto the fertilizer in a rotary blender. A minimum of 132 kg/acre of fertilizer must be used if spring applied and a minimum of 100 kg/acre of fertilizer must be used if fall applied. Apply as soon as possible after blending using a properly calibrated granular fertilizer spreader. Incorporate once within 24 hours and wait at least 6 days prior to incorporating the second time. Do not mix with nitrate fertilizers as this mixture could explode. If a fertilizer spin spreader is used, calibrate and apply using 100 percent overlap to ensure even distribution.

7. Page 181 - Table 22 Grazing and Feeding Restrictions

   ALLY - "Wheat or barley may be grazed by or fed to livestock any time after treatment."

   GLEAN - "Wheat or barley or oats may be grazed by or fed to livestock any time after treatment."

8. Excel Recommendations pages 74, 81, 87, 91, 98, 106, 121, 142, 145, 148

   The leaf stage recommendations should read 1 to 4 leaf stage not 1 to 6 leaf stage. The label statement reads "Grassy weeds will be controlled provided the total number of leaves does not exceed six."

FORTRESS (14%)

NEW REGISTRATION FOR SPRING APPLICATION
in Wheat, Barley, Rapeseed. Flax, Mustard

CAUTION: Wheat, barley, and flax injury may occur if soil conditions are not conducive to rapid crop emergence. Do not apply Fortress for wheat on land which has been treated with trifluralin (Rival, Treflan, Triflurex) during the previous 16 months.

CAUTION: Population of green foxtail tolerant to trifluralin have developed in a small number of fields in Manitoba. Fortress will not control trifluralin tolerant foxtail.

APPLICATION TIMING: Prior to seeding crop.

RATES: For spring application.

CROP	RATE kg/acre			
	ORGANIC MATTER			
	Less than 2%	2-4%	4-6%	Greater than 6%
Wheat	not recommended	not recommended	4.45	5.67
Barley	not recommended	4.45	5.67	6.88
Rapeseed, Mustard, Flax	4.45	5.67	6.88	6.88

APPLICATION: Granular applicator. Properly calibrated equipment.

INCORPORATION: First within 24 hours of application, delay second incorporation for at least 48 hours but it must be done prior to crop emergence. If second incorporation is conducted after seeding it should be done with a harrow or other suitable tillage equipment adjusted to a depth so as not to disturb the seed. If ridging is a problem after seeding, one harrowing is recommended to eliminate the ridging and ensure uniform distribution of the herbicide. For additional incorporation instruction refer to the 1989 Guide to Chemical Weed Control. To minimize crop injury seed wheat and barley 2.4 to 3.0 inches (6 to 7 cm) deep to place seed below the treated layer. Also increase usual seeding rate by 10%. For additional information on application and seeding requirements refer to the appropriate section in the 1989 Guide to Chemical Weed Control.

FUSILADE

In Rapeseed, Fusilade may be tank mixed with Lontrel for Canada Thistle control and other labelled broadleaf weeds. In Triazine tolerant Canola, Fusilade may be tank mixed with Lontrel for Canada Thistle control or with Bladex for control of broadleaf weeds labelled for control.

GARLON * 4 (480 g/L)

For Roadside and Brush Control

RATES: Woody Plant Control - Foliage treatment: 4.0 to 8.0 L/1000 L.

Broad Leaf Weed Control - 0.405 to 1.62 L/acre.

SPECIES CONTROLLED

BRUSH 4 L/1000 L SPRAY SOLUTION

Alder	Buckthorn	Poplar
Ash	Cottonwood	Sumac
Aspen	Dogwood	Tamarack
Basswood	Hawthorn	Wild Rose
Birch	Maples	Willow

BRUSH 8.0 L/1000 L SPRAY SOLUTION

Chokecherry	Red Maple	Pines
Elm	Oaks	Raspberry

PERENNIAL BROADLEAF WEEDS

Burdock	Field Bindweed	Smooth Bedstraw
Chicory	Lambsquarters	Vetch
Curled Dock	Ragweed	Wild Lettuce
Dandelion	Smartweed	

APPLICATION INSTRUCTIONS

Apply when woody plants and weeds are actively growing. Do not treat woody plants which exceed 2.5 cm in height. Use higher rates on ash, chokecherry, elm, maples, oaks, pines or for late summer applications when plant growth rates are reduced.

GROUND APPLICATION

1. Stem - Foliage Treatment (Woody species) use 4.0 to 8.0 L in enough water to make 1000 L of spray mixture. Coverage should be thorough to wet all leaves, stems, and root collars, do not exceed 1400 kPa pressure at spray nozzle.
2. Broadcast Treatment (Woody species) use 1.62 to 3.24 L/acre in a minimum of 90 L of spray solution per acre. Do not exceed 275 kPa pressure at the nozzle.
3. Broadcast Treatment (Broadleaf weeds) use 0.405 to 1.62 L/acre in enough water for uniform coverage.

NOTE: Garlon may also be applied as a basal bark, dormant stem and cut surface treatment. Refer to product label for specific application and mixing instructions.

LAREDO (356 g/L), WRANGLER (356 g/L)

These products contain 356 g/L of glyphosate and are registered for several uses. Refer to the Roundup sections throughout the 1989 Guide to Chemical Weed Control for use rates and application procedures.

LONTREL

Table 24 Soil Residue Summary
Change to read "All crops except wheat, oats, barley, rye, flax, rapeseed. Do not plant fields treated with Lontrel herbicides to potatoes or lentils until the third growing season after the year of treatment.

POAST (184 g/L)

Table 1 New Registrations

CROP	MAXIMUM RATE (L/acre)	APPLICATION TO HARVEST INTERVAL (Days)
Alfalfa (seedling and established)	1.78 L/acre or 1.09 L/acre plus 1.62 L/acre Ammonium Sulfate	70
Buckwheat*	0.57 L/acre	85
Snapbeans	1.78 L/acre	60
Adzuki beans	1.78 L/acre	80
Fababeans	1.78 L/acre	80
Lima beans	1.78 L/acre	80
Mung beans	1.78 L/acre	80

* Since 85 days to harvest will exceed the growing days to maturity for all buckwheat varieties recommended in Manitoba, this herbicide cannot be recommended for use in Manitoba.

WEEDS CONTROLLED: Table 2

WEED	RATE (L/acre)
green or yellow foxtail barnyard grass, proso millet witchgrass and volunteer corn	0.324 - 0.405
wild oats	0.57 - 0.65
volunteer wheat and oats	0.65
volunteer barley	0.65 - 0.77
quackgrass suppression	1.78

Where a rate range is specified for a weed, use the higher rate to control heavy infestations.

APPLICATION TIMING

a) Crop Stage: No leaf stage restriction but follow preharvest interval as outlined above.
b) Weed Stage: 2 to 5 leaf stage of annual weeds.

RATE: As listed above (Table 2) dependent on the maximum rate listed for crop (Table 1).

ADDITIVES: Assist oil concentrate or Merge at 1L/100L spray solution or at 1 to 2 L/100L spray solution for quackgrass.

WATER VOLUME: 25 to 80 L/acre. Apply in at least 45 L/acre if crop or weed growth is dense and when spraying quackgrass.

PRESSURE: 275 kPa (40 psi)

NOZZLES: Stainless steel 80 ^{o} flat fan directed 45 ^{o} forward.

TANK MIXES:

Herbicides: None.
Fertilizer: See product label for recommendation information on mixtures with ammonium sulfate on alfalfa.
Insecticides: None.

RESTRICTIONS

Preharvest: refer to Table 1 for specific crop.
Rainfall: Within one hour will reduce control.
Grazing: Do not graze or harvest as forage.
Recropping: Do not seed cereal, corn or forage grasses within 14 days of application.
Storage: May be frozen.

ENVIRONMENTAL PRECAUTIONS: Control will be reduced if weeds are not actively growing due to drought, flooding or prolonged cool (15 ^{o}C or cooler) periods. Do not apply to grasses stressed for more than 20 days due to lack of moisture.

COMMENTS: For quackgrass suppression, rhizomes must be thoroughly fragmented prior to seeding. Control may be enhanced by inter-row cultivation but do not cultivate sooner than 7 days after application.

NOTE: MERGE can be used as an additive with POAST at 1 L/100 L spray solution for annual weeds or at 1 to 2 L/100 L spray solution for quackgrass with ground application. NOTE: NOT FOR USE WITH AMMONIUM SULFATE and not for use with aerial application.

REFINE (75%)

For use on wheat (spring, winter or durum), barley or oats.

WEEDS CONTROLLED

Chickweed	Russian thistle	Volunteer rapeseed
Hemp-nettle	Green Smartweed	Cow cockle
Lady's thumb	Stinkweed	Wild buckwheat
Redroot pigweed	Lamb's quarters	Wild mustard
Corn Spurry		

APPLICATION TIMING

Crop Stage: 2 leaf to shotblade stage.
Weed Stage: less than 4 inches (10 cm) tall or across. For chickweed apply in the 1 to 6 leaf stage before the crop shields the weeds and wild buckwheat is in the 1 to 3 leaf stage.

RATES: 0.008 kg/acre

ADDITIVES: Add AgSurf, Agral 90, or Cittowett Plus at 2 L per 1000 L spray solution.

WATER VOLUME: 45 L/acre.

PRESSURE: 275 kPa (40 psi).

NOZZLES: Flat fan nozzles with 50 mesh filters and screens.

MIXING: Add the proper amount of Refine into the necessary volume of water in the spray tank with agitator running. Prepare the mixture to use a minimum of 45 L spray solution per acre. Continuous agitation is required for a uniform suspension and application. Add the surfactant (AgSurf, Agral 90, or Cittowett Plus) as the last ingredient. Antifoaming agent such as Halt may be required.

TANK MIXES

Herbicides: Refine may be tank mixed with MCPA Amine 500 at 0.405 L/acre plus recommended surfactant. For product volumes of other MCPA Amine formulations refer to Table 21. Refine may be tank mixed with Hoe-Grass 284 for use on wheat and barley (except varieties Betzes, Glenn, Klages or Norbert). Use Refine at 0.008 kg/acre plus Hoe-Grass 284 at 1.13 L/acre. NOTE: THIS TANK MIX WILL ONLY CONTROL WILD OATS AND REFINE LABELLED BROADLEAF WEEDS.
Fertilizer: None.
Insecticides: None.

RESTRICTIONS

Rainfall: Within 6 hours will reduce control.
Grazing: Do not graze or feed treated crop within 7 days of application.
Recropping: No restrictions the year after application.
Storage: Store in a cool, dry place.

ENVIRONMENTAL PRECAUTION: Do not apply to crops stressed by severe weather conditions, frost, low fertility, drought, water saturated soils, disease, or insect damage as crop injury may result. Under certain conditions (such as heavy rainfall, prolonged cool weather, frost conditions, wide fluctuations in day/night temperatures) lightening in crop color and a reduction in crop height may occur.

COMMENTS: Some naturally occurring populations of certain labelled weeds will not be controlled by Refine, Ally, or Glean. These populations are able to survive a use rate several times higher than needed to control susceptible populations. To delay selection for resistant populations rotate the use of Refine, Ally and/or Glean with other herbicides effective on the same weeds. Avoid the use of Refine, Ally and/or Glean repeatedly in the same field. Recommended tank mixtures of Refine and MCPA may help delay the selection for resistant populations of weeds that are normally controlled or supressed by both herbicides - see tank mix section. Refer to product label for sprayer cleanout procedures to avoid injury to crops other than wheat, barley or oats.

RIVAL 10G (10%), TREFLAN QR5 (5%) Fall Application For Wheat

CONTROLS: Green and yellow foxtail.

CAUTION: Wheat injury can occur if soil conditions are not conducive to rapid wheat emergence. Do not apply RIVAL 10G or TREFLAN QR5 for wheat on fields which have been treated with trifluralin (Rival, Treflan, Triflurex) during the previous 16 months. Application to eroded knolls will result in reduced crop stands.

CAUTION: Populations of green foxtail tolerant to trifluralin have developed in a small number of fields, primarily in southwestern Manitoba. Rival 10G or Treflan QR5 will not control trifluralin tolerant foxtail.

APPLICATION TIMING: Fall application only - after September 1, but before soil freezes up.

RATES

HERBICIDE	ALL SOILS 2-8% ORGANIC MATTER
Rival 10G	2.23 kg/acre
Treflan QR5	4.45 kg/acre

APPLICATION: Granular applicator. Properly calibrate equipment, since over application or overlaps will cause crop injury.

INCORPORATION: Incorporate with cultivators or disc implements only. Deep tillage cultivators do not provide the best mixing action however may be needed for the first incorporation if trash conditions warrant it. Do not delay the first incorporation more than 24 hours after application. Incorporate at a working speed of 8-13 km/hr (5-8 mph). The second incorporation must be delayed at least 5 days after the first and must be done at right angles to the first incorporation. The second incorporation may be done in the fall or in the spring prior to seeding wheat crop. Both incorporations must be to a depth of 5-8 cm (2-3 inches). Subsequent workings must be no deeper than 8 cm (3 inches).

Do not apply and incorporate when soil is in poor working condition (wet, lumpy, or cloddy)

Do not incorporate with rodweeders, harrows, or hoe drills.

TANK MIXES:

Herbicides: None
Fertilizer: None
Insecticide: None

RESTRICTIONS

Rainfall: No effect once incorporated.
Recropping: Rival 10G and Treflan QR5 leave a residue in the soil which may affect subsequent crops. See Table 24 in the 1989 Guide to Chemical Weed Control or product label for a list of susceptible crops.
Storage: Do not store in direct sunlight, store in a cool, dry place.

COMMENTS: Seed wheat at 1.5 to 2.5 inches (3 to 6 cm) deep into a warm, moist seed bed. Shallow seeding is especially important for semi-dwarf varieties. The seed bed should be firmly packed or harrowed after seeding to promote good germination.

1989 HERBICIDE PRICE LIST

This price list is compiled annually by the Weeds Section of Manitoba Agriculture. It is intended to assist farmers in planning weed control programs.

Figures given are suggested retail prices only. Actual prices may vary from outlet to outlet and from one area of the province to another.

Prices do not include the $1.00/container disposal levy instituted by the manufacturers. Prices do not include any special price programs or incentives (e.g. coupons, net - net discounts), nor surfactants which must be purchased separately.

The final list was compiled on April 10th, 1989. Price changes since that date will not be reflected herein.

HERBICIDE PRICES

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CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
			0.00	0.00
BARLEY	2,4-D AMINE	0.506-0.688	1.85	2.51
BARLEY	2,4-D AMINE	0.340	1.24	1.24
BARLEY	2,4-D LV ESTER	0.506-0.688	2.76	3.75
BARLEY	2,4-D LV ESTER	0.340	1.85	1.85
BARLEY	AFOLAN+MCPA AMINE	0.19-0.251 + 0.445	5.52	6.74
BARLEY	ASSERT	0.53-0.65	13.55	16.61
BARLEY	ASSERT + 2,4-D LV ESTER	0.65 + 0.23	17.86	17.86
BARLEY	ASSERT + MCPA ESTER	0.65 + 0.45	19.11	19.11
BARLEY	AVADEX BW	1.42 - 1.72	11.63	14.09
BARLEY	AVADEX BW + RIVAL	1.42-1.72 + 0.49-0.65	16.26	20.23
BARLEY	AVADEX BW + TREFLAN EC	1.72 + 0.445-0.607	16.13	20.19
BARLEY	AVADEX BW +TRIFLUREX	1.42 -1.72 +0.57 - 0.85	16.08	20.72
BARLEY	AVADEX GRANULAR	4.45 - 6.88	11.39	17.61
BARLEY	AVENGE 200-C	1.42-1.72	12.64	15.31
BARLEY	AVENGE 200-C + 24-D LV ES	1.42-1.72 + 0.51-0.69	15.42	19.07
BARLEY	AVENGE 200-C + BUCTRIL M	1.42-1.72 + 0.405	16.68	19.35
BARLEY	AVENGE 200-C + ESTAPROP	1.42-1.72 + 0.71	19.16	22.10
BARLEY	AVENGE 200-C + MCPA ESTER	1.42-1.72 + 0.51-0.69	15.42	19.07
BARLEY	AVENGE 200-C + SABRE	1.42-1.72 + 0.316	16.68	19.35
BARLEY	AVENGE 200-C + TORCH DS	1.42-1.72 + 0.253-0.304	17.32	20.93
BARLEY	AVENGE 200C +DIPHENOPROP	1.42 - 1.72 + 0.71	17.86	20.53
BARLEY	BANVEL + 2,4-D AMINE	0.093 + 0.344	3.68	3.68
BARLEY	BANVEL + MCPA AMINE	0.093 + 0.344	3.88	3.88
BARLEY	BANVEL + MCPA SODIUM SALT	0.093 + 0.57	4.50	4.50
BARLEY	BANVEL + MCPAE	0.093 + 0.405	4.09	4.09
BARLEY	BAR-POI	0.54	2.96	2.96
BARLEY	BAR-POI + 2,4-D AMINE	0.54 + 0.51 - 0.69	4.82	5.48
BARLEY	BAR-POI + MCPA AMINE	0.54 + 0.51 - 0.69	4.93	5.63
BARLEY	BLAGAL	0.91	6.51	6.51
BARLEY	BUCTRIL M	0.405	4.04	4.04
BARLEY	CARBYNE	0.6-0.7	6.95	8.11
BARLEY	DIPHENOPROP 600	0.71	5.22	5.22
BARLEY	DYVEL	0.506	4.43	4.43
BARLEY	ESTAPROP	0.71	5.24	5.24
BARLEY	FORTRESS	4.45 - 6.88	11.17	17.27
BARLEY	HOE GRASS	1.01	12.52	12.52
BARLEY	HOE GRASS + TORCH DS	1.13 + 0.253	18.69	18.69
BARLEY	HOE GRASS II	1.42	16.19	16.19
BARLEY	HOE GRASS+REFINE(WO ONLY)	1.13 + 0.008	17.53	17.53
BARLEY	KIL-MOR	0.344	2.89	2.89
BARLEY	LEXONE DF	0.129-0.142	8.67	9.54
BARLEY	LEXONE DF + BANVEL	0.129 + 0.093	11.09	11.09
BARLEY	LEXONE DF + MCPA AMINE	0.129-0.142 + 0.34-0.453	10.11	11.47
BARLEY	LOROX L + MCPA AMINE	0.172-0.223 + 0.340-0.453	5.46	7.15
BARLEY	MCPA AMINE	0.51 - 0.69	2.17	2.93
BARLEY	MCPA AMINE	0.340	1.44	1.44
BARLEY	MCPA ESTER	0.51 - 0.69	2.83	3.83
BARLEY	MCPA ESTER	0.340	1.89	1.89
BARLEY	MCPA SODIUM SALT	0.85 - 1.13	3.10	4.12

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
BARLEY	MCPA SODIUM SALT	0.567	2.07	2.07
BARLEY	MCPAK	0.85	3.50	3.50
BARLEY	MATA TCA	0.54	3.02	3.02
BARLEY	MATA TCA + 2,4-D AMINE	0.54 + 0.445	4.67	4.67
BARLEY	MATA TCA + BUCTRIL M	0.54 + 0.405	7.06	7.06
BARLEY	MATA TCA + MCPA AMINE	0.54 + 0.445	4.91	4.91
BARLEY	REFINE	0.008	3.52	3.52
BARLEY	REFINE + MCPA AMINE 500	0.008 + 0.405	5.24	5.24
BARLEY	RIVAL	0.49-0.65	4.63	6.14
BARLEY	RIVAL 10G (FALL ONLY)	3.44-5.67	7.74	12.76
BARLEY	SABRE	0.316	4.04	4.04
BARLEY	SENCOR 75 DF	0.081	5.45	5.45
BARLEY	SENCOR 75DF	0.129-0.152	8.69	10.23
BARLEY	SENCOR 75DF + 2,4-D AMINE	0.129 - 0.152 + 0.340-0.453	9.93	11.88
BARLEY	SENCOR 75DF + BANVEL	0.129 + 0.093	11.11	11.11
BARLEY	STANPEDE 360	1.11	8.56	8.56
BARLEY	STANPEDE 360 + MCPA ESTER	1.11 + 0.223	9.78	9.78
BARLEY	STANPEDE CM	1.11	9.39	9.39
BARLEY	TARGET	0.405 - 0.61	3.26	4.92
BARLEY	TCA SOLUTION	0.81	3.43	3.43
BARLEY	TCA SOLUTION + BUCTRIL M	0.81 + 0.405	8.15	8.15
BARLEY	TCA SOLUTION + MCPA ESTER	0.81 + 0.445	5.86	5.86
BARLEY	TORCH DS	0.253-0.304	4.68	5.62
BARLEY	TORCH DS + 2,4-D LV ESTER	0.253 + 0.227-0.340	5.92	6.53
BARLEY	TORCH DS + MCPA ESTER	0.253 + 0.227-0.340	5.92	6.53
BARLEY	TORCH DS + MCPAK	0.253 + 0.283-0.445	5.85	6.51
BARLEY	TORDON 202 C	0.809	4.04	4.04
BARLEY	TREFLAN EC	0.45 -0.61	4.50	6.10
BARLEY	TREFLAN QR5 (FALL ONLY)	8.9-11.3	10.06	12.77
BARLEY	TRIFLUREX	0.57 - 0.85	4.30	6.42
BUCKWHEAT	HOE GRASS	1.01	12.52	12.52
CANARY SD	AVENGE 200-C	1.42-1.72	9.88	11.97
CANARY SD	BANVEL + MCPA AMINE	0.117 + 0.344	4.50	4.50
CANARY SD	BUCTRIL M	0.405	4.04	4.04
CANARY SD	MATAVEN	2.02	13.21	13.21
CANARY SD	SABRE	0.316	4.04	4.04
CANARY SD	STANPEDE CM	1.11	9.39	9.39
CANARY SD	TORCH DS	0.253-0.304	4.68	5.62
CANARYSEED	TARGET	0.405 - 0.61	3.26	4.92
CORN	2,4-D AMINE	0.607-0.688	2.22	2.51
CORN	AATREX-NINE-0 + OIL CONC	1.01-1.36 + 1.13	7.93	9.93
CORN	AATREX-PLUS	1.72-3.44	6.78	13.55
CORN	ATRAZINE LQD + OIL CONC	1.82-2.73 + 1.13	8.43	11.57
CORN	BANVEL	0.236	6.14	6.14
CORN	BANVEL + 2,4-D AMINE	0.118 + 0.344	4.34	4.34
CORN	BASAGRAN	0.71 - 0.91	14.65	18.78
CORN	BLADEX 80W	0.91-1.42	12.20	19.04
CORN	BLADEX 80W + BIO-VEG	1.11 + 0.607-0.809	16.41	16.91
CORN	BLADEX 80W + DUAL	1.01-1.21 + 0.81-1.11	30.79	39.87
CORN	BLADEX 80W + ERADICANE	1.01-1.21 + 1.72-3.44	29.97	49.08

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
CORN	BLADEX LIQUID	1.52-2.33	13.12	20.11
CORN	BLADEX LIQUID + DUAL	1.72-2.02 + 0.81-1.11	32.09	41.07
CORN	BLADEX LIQUID + ERADICANE	1.72-2.02 + 1.72-3.44	31.27	50.28
CORN	BUCTRIL M	0.405	4.04	4.04
CORN	DUAL	0.81-1.11	17.25	23.64
CORN	ERADICANE 8-E	1.72-3.44	16.43	32.85
CORN	KIL-MOR	0.344-0.445	2.89	3.74
CORN	LADDOK	1.21-1.62	11.71	15.68
CORN	PRINEXTRA	2.71-3.44	18.43	23.39
CORN	SUTAN+	1.72-2.23	15.65	20.29
CORN	SUTAN+ + ATRAZINE LQD	1.72-2.23 + 1.01	19.29	23.93
CORN	SUTAN+ + ATRAZINE WP	2.23 + 0.506	23.27	23.27
CORN	SUTAN+ + BLADEX 80W	2.23 + 1.01-1.11	33.83	35.18
CORN	SUTAN+ + BLADEX LIQUID	2.23 + 1.72-2.02	35.13	37.72
CORN	TORCH DS	0.304-0.354	5.62	6.55
CRAMBE	RIVAL	0.65-1.1	6.14	10.38
CRAMBE	TREFLAN EC	0.61-1.05	6.10	10.50
CRAMBE	TRIFLUREX	0.81 - 1.1	6.12	8.31
DRY BEANS	BASAGRAN	0.71 - 0.91	14.65	18.78
DRY BEANS	EPTAM 8-E	1.72-2.23	16.32	21.16
DRY BEANS	HOE GRASS	1.42	17.61	17.61
DRY BEANS	POAST A (FXTL)	0.324	10.41	10.41
DRY BEANS	POAST B (WLDOAT)	0.57	18.32	18.32
DRY BEANS	POAST C (V WHT)	0.65	17.39	17.39
DRY BEANS	POAST D (V BLY)	0.77	24.75	24.75
DRY BEANS	POAST E (QG)	1.78	57.21	57.21
DRY BEANS	POAST PPACK (ANNGR)	0.57	20.12	20.12
DRY BEANS	RIVAL	0.65-1.1	6.14	10.38
DRY BEANS	TREFLAN EC	0.61 - 1.05	6.10	10.50
DRY BEANS	TRIFLUREX	0.81 - 1.1	6.12	8.31
FABA BEANS	BASAGRAN	0.71 - 0.91	14.65	18.78
FABA BEANS	HOE GRASS	1.01	12.52	12.52
FABA BEANS	LEXONE DF + TREFLAN EC	0.142-0.223 + 0.61-1.05	15.64	25.49
FABA BEANS	RIVAL	0.65-1.1	6.14	10.38
FABA BEANS	TREFLAN EC	0.61-1.05	6.10	10.50
FABA BEANS	TREFLAN EC + SENCOR 75 DF	0.61-1.05 + 0.152-0.223	16.33	25.51
FABABEANS	EDGE	0.65 - 0.89	9.72	13.31
FABABEANS	TRIFLUREX	0.81 - 1.1	6.12	8.31
FLAX	AVADEX BW	1.72-2.23	14.09	18.26
FLAX	AVADEX BW GRANULAR	5.7 - 8.9	14.59	22.78
FLAX	BAR-FOX	1.81	9.92	9.92
FLAX	BAR-FOX + MCPA AMINE	1.81 + 0.51 - 0.69	12.09	12.85
FLAX	BASAGRAN	0.71 - 0.91	14.65	18.78
FLAX	BUCTRIL M	0.405	4.04	4.04
FLAX	CARBYNE	0.6-0.7	6.95	8.11
FLAX	DALAPON	0.445-0.71	2.24	3.58
FLAX	EPTAM 8-E	1.42-1.72	13.48	16.32
FLAX	EXCEL	1.01	15.76	15.76
FLAX	FORTRESS	5.67 - 6.88	14.23	17.27
FLAX	FUSILADE A (V CORN)	0.243	10.24	10.24

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
FLAX	FUSILADE B (V CER)	0.324	13.65	13.65
FLAX	FUSILADE C (WLDOAT)	0.405	17.06	17.06
FLAX	FUSILADE D (FXTL)	0.57	24.01	24.01
FLAX	FUSILADE E (QG)	0.81	34.12	34.12
FLAX	HOE GRASS	1.01	12.52	12.52
FLAX	HOE GRASS + TORCH DS	1.13 + 0.253	18.69	18.69
FLAX	HOE GRASS II	1.42	16.19	16.19
FLAX	MCPA AMINE	0.51 - 0.69	2.17	2.93
FLAX	MCPA AMINE	0.34	1.44	1.44
FLAX	MCPA SODIUM SALT	0.85-1.13	3.10	4.12
FLAX	MCPA SODIUM SALT	0.567	2.07	2.07
FLAX	MCPAE	0.85	3.50	3.50
FLAX	MATA TCA	1.81	10.14	10.14
FLAX	MATA TCA + MCPA AMINE	1.81 + 0.445	12.03	12.03
FLAX	MATA TCA + MCPA ESTER	2.23-3.64 + 0.445	14.92	22.81
FLAX	POAST + BUCTRIL M	0.324-0.77 + 0.405	14.45	28.79
FLAX	POAST + MCPA AMINE	0.324-0.77 + 0.51-0.69	12.58	27.68
FLAX	POAST + MCPA ESTER	0.324-0.77 + 0.51-0.69	13.17	28.50
FLAX	POAST + SABRE	0.324-0.77 + 0.316	14.45	28.79
FLAX	POAST A (FXTL)	0.324	10.41	10.41
FLAX	POAST B (WLDOAT)	0.57	18.32	18.32
FLAX	POAST C (V WHT)	0.65	20.89	20.89
FLAX	POAST D (V BLY)	0.77	24.75	24.75
FLAX	POAST E (QG)	1.78	57.21	57.21
FLAX	POAST PPACK (ANNGR)	0.57	20.12	20.12
FLAX	POAST PPACK (QG)	1.1	37.15	37.15
FLAX	RIVAL 10 G (FALL)	4.45 - 6.9	10.01	15.53
FLAX	RIVAL 10G	5.7-6.9	12.83	15.53
FLAX	SABRE	0.316	4.04	4.04
FLAX	STAMPEDE 360	1.11	8.56	8.56
FLAX	STAMPEDE 360 + MCPA ESTER	1.11 + 0.223	9.78	9.78
FLAX	STAMPEDE CM	1.11	9.39	9.39
FLAX	TCA SOLUTION	2.23-3.64	9.43	15.40
FLAX	TORCH DS	0.253	4.68	4.68
FLAX	TORCH DS + MCPA AMINE	0.253 + 0.227	5.64	5.64
FLAX	TORCH DS + MCPAE	0.253 + 0.283	5.85	5.85
FLAX	TREFLAN QR 5 (FALL ONLY)	8.9-13.8	10.06	15.59
LENTILS	CARBYNE	0.6-0.7	6.95	8.11
LENTILS	EXCEL	1.01	15.76	15.76
LENTILS	HOE GRASS	1.01	12.52	12.52
LENTILS	POAST A (FXTL)	0.324	10.41	10.41
LENTILS	POAST B (WLD OAT)	0.57	18.32	18.32
LENTILS	POAST C (V WHT)	0.65	20.89	20.89
LENTILS	POAST D (V BLY)	0.77	24.75	24.75
LENTILS	POAST E (QG)	1.78	57.21	57.21
LENTILS	POAST PPACK (ANNGR)	0.57	20.12	20.12
LENTILS	POAST PPACK (QG)	1.1	37.15	37.15
LENTILS	SENCOR 75 DF	0.111	7.47	7.47
LENTILS	TREFLAN QR 5 (FALL ONLY)	8.9-13.8	10.06	15.59
MUSTARD	AVADEX BW	1.72-2.23	14.09	18.26

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
MUSTARD	AVADEX BW GRANULAR	5.7 - 8.9	14.59	22.78
MUSTARD	CARBYNE	0.6-0.7	6.95	8.11
MUSTARD	EDGE	0.65 - 0.89	9.72	13.31
MUSTARD	EXCEL	0.91	14.20	14.20
MUSTARD	EXCEL	0.91	14.20	14.20
MUSTARD	FORTRESS	5.67 - 6.88	14.23	17.27
MUSTARD	HOE GRASS	1.01	12.52	12.52
MUSTARD	RIVAL	0.65-1.1	6.14	10.38
MUSTARD	RIVAL	0.65 - 1.1	6.14	10.38
MUSTARD	TREFLAN EC	0.61-1.05	6.10	10.50
MUSTARD	TREFLAN QR 5 (FALL)	8.9 - 13.8	10.06	15.59
MUSTARD	TREFLAN QR 5 (SPRING)	6.9 - 11.3	7.80	12.77
MUSTARD	TRIFLUREX	0.81 - 1.1	6.12	8.31
OATS	APOLAN P+ MCPA AMINE	0.19-0.251 + 0.445	5.69	6.91
OATS	BANVEL + MCPA AMINE	0.093 - 0.117 + 0.344	3.88	4.50
OATS	BANVEL + MCPA SODIUM SALT	0.093 - 0.117 + 0.344	3.68	4.30
OATS	BANVEL + MCPAK	0.093 - 0.117 + 0.405	4.09	4.71
OATS	BAR-POI	0.542-1.08	2.97	5.92
OATS	BAR-POI + MCPA AMINE	0.542-1.08 + 0.51 - 0.69	4.94	8.59
OATS	BLAGAL	0.91	6.51	6.51
OATS	BUCTRIL M	0.405	4.04	4.04
OATS	BYVEL	0.506	4.43	4.43
OATS	KIL-MOR	0.344-0.445	2.89	3.74
OATS	LOROX L + MCPA AMINE	0.172-0.223 + 0.34-0.453	5.46	7.15
OATS	MCPA AMINE	0.51 - 0.69	2.17	2.93
OATS	MCPA AMINE	0.34	1.44	1.44
OATS	MCPA ESTER	0.51 - 0.69	2.83	3.83
OATS	MCPA ESTER	0.34	1.89	1.89
OATS	MCPA SODIUM SALT	0.85-1.13	3.10	4.12
OATS	MCPA SODIUM SALT	0.567	2.07	2.07
OATS	MCPAK	0.85	3.50	3.50
OATS	MATA TCA	0.54-1.09	3.02	6.10
OATS	MATA TCA + MCPA AMINE	0.54-1.08 + 0.445	4.91	7.94
OATS	REFINE	0.008	3.52	3.52
OATS	REFINE + MCPA AMINE 500	0.008 + 0.405	5.24	5.24
OATS	STAMPEDE 360	1.11	8.56	8.56
OATS	STAMPEDE 360 + MCPA ESTER	1.11 + 0.223	9.78	9.78
OATS	STAMPEDE CM	1.11	9.39	9.39
OATS	TARGET	0.405 - 0.61	3.26	4.92
OATS	TCA SOLUTION	0.81-1.52	3.43	6.43
OATS	TCA SOLUTION + MCPA ESTER	0.81-1.52 + 0.445	5.90	8.90
OATS	TORCH DS	0.253-0.304	4.68	5.62
OATS	TORCH DS + MCPA ESTER	0.253 + 0.227-0.340	5.94	6.57
OATS	TORCH DS + MCPAK	0.253 + 0.283-0.445	5.85	6.51
PEAS	AVADEX BW	1.72	14.09	14.09
PEAS	BAR-POI	1.82	9.97	9.97
PEAS	BAR-POI+ MCPA SODIUM SALT	1.82 + 0.61	12.20	12.20
PEAS	BASAGRAN	0.71 - 0.91	14.65	18.78
PEAS	CARBYNE	0.6-0.7	6.95	8.11
PEAS	DALAPON	0.445	2.24	2.24

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
PEAS	DALAPON + MCPA SOD. SALT	0.445 + 0.607	4.46	4.46
PEAS	EDGE	0.65 - 0.89	9.72	13.31
PEAS	EXCEL	0.91	14.20	14.20
PEAS	HOE GRASS	1.01	12.52	12.52
PEAS	LEXONE 75DF	0.113-0.152	7.61	10.23
PEAS	MCPA SODIUM SALT	0.61	2.23	2.23
PEAS	NATA TCA	1.82	10.19	10.19
PEAS	NATA TCA + MCPA SOD. SALT	1.82 + 0.607	12.69	12.69
PEAS	POAST A (FXTL)	0.324	10.41	10.41
PEAS	POAST B (WLDOAT)	0.57	18.32	18.32
PEAS	POAST C (VWHT)	0.65	20.89	20.89
PEAS	POAST D (V BLY)	0.77	24.75	24.75
PEAS	POAST E (QG)	1.78	57.21	57.21
PEAS	POAST PPACK (ANNGR)	0.57	20.12	20.12
PEAS	RIVAL	0.65-1.1	6.14	10.38
PEAS	SENCOR 75 DF	0.111-0.152	7.47	10.23
PEAS	TCA SOL. + MCPA SOD. SALT	2.25-3.64 + 0.607	11.74	17.62
PEAS	TCA SOLUTION	2.25-3.64	9.52	15.40
PEAS	TREFLAN EC	0.61-1.05	6.10	10.50
PEAS	TREFLAN QR 5 (FALL)	8.9 - 13.8	10.06	15.59
PEAS	TREFLAN QR 5 (SPRING)	6.9 - 11.3	7.80	12.77
PEAS	TRIFLUREX	0.81 - 1.1	6.12	8.31
PEAS	TROPOTOX PLUS	1.11-1.72	8.47	13.12
RAPESEED	AVADEX BW	1.72-2.23	14.09	18.26
RAPESEED	AVADEX BW GRANULAR	5.7 - 8.9	14.59	22.78
RAPESEED	BAR-POX	1.81	9.92	9.92
RAPESEED	CARBYNE	0.6-0.7	6.95	8.11
RAPESEED	DALAPON	0.445-0.71	2.24	3.58
RAPESEED	EXCEL	0.91	14.20	14.20
RAPESEED	EXCEL + LONTREL	0.91 + 0.3	31.90	31.90
RAPESEED	FORTRESS	5.67 - 6.88	14.23	17.27
RAPESEED	FUSILADE + LONTREL	0.243-0.405 + 0.3-0.6	27.94	52.46
RAPESEED	FUSILADE A (V CORN)	0.243	10.24	10.24
RAPESEED	FUSILADE B (V CER)	0.324	13.65	13.65
RAPESEED	FUSILADE C (WLDOAT)	0.405	17.06	17.06
RAPESEED	FUSILADE D (QG SPRSN)	0.405	17.06	17.06
RAPESEED	HOE GRASS	1.01	12.52	12.52
RAPESEED	HOE GRASS + LONTREL	1.13 + 0.3	31.71	31.71
RAPESEED	LONTREL	0.3 - 0.61	17.70	35.99
RAPESEED	NATA TCA	1.81	10.14	10.14
RAPESEED	POAST A (FXTL)	0.324	10.41	10.41
RAPESEED	POAST B (WLDOAT)	0.57	18.32	18.32
RAPESEED	POAST C (V WHT)	0.65	20.89	20.89
RAPESEED	POAST D (V BLY)	0.77	24.75	24.75
RAPESEED	POAST E (QG)	1.78	57.21	57.21
RAPESEED	POAST PPACK (ANNGR)	0.57	20.12	20.12
RAPESEED	RIVAL	0.65 - 1.1	6.14	10.38
RAPESEED	RIVAL 10G	4.45-6.9	10.01	15.53
RAPESEED	RIVAL 10G	3.4-5.7	7.65	12.83
RAPESEED	TCA SOLUTION	2.25-3.64	9.52	15.40

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
RAPESEED	TREFLAN EC	0.61 - 1.05	6.10	10.50
RAPESEED	TREFLAN QR 5 (FALL)	8.90-13.8	10.06	15.59
RAPESEED	TREFLAN QR 5 (SPRING)	6.9-11.33	7.80	12.80
RAPESEED	TRIFLUREX	0.81 -1.1	6.12	8.31
RYE	2,4-D AMINE	0.506-0.688	1.85	2.51
RYE	2,4-D AMINE	0.340	1.24	1.24
RYE	2,4-D LV ESTER	0.506-0.688	2.76	3.75
RYE	2,4-D LV ESTER	0.340	1.85	1.85
RYE	AVENGE 200-C	1.42-1.72	12.64	15.31
RYE	BANVEL + 2,4-D AMINE	0.093-0.117 + 0.344	3.68	4.30
RYE	BUCTRIL M	0.405	4.04	4.04
RYE	HOE GRASS	1.01	12.52	12.52
RYE	MCPA AMINE	0.51 - 0.69	2.17	2.93
RYE	MCPA AMINE	0.340	1.44	1.44
RYE	MCPA ESTER	0.51 - 0.69	2.83	3.83
RYE	MCPA ESTER	0.340	1.89	1.89
RYE	MCPA SODIUM SALT	0.85-1.13	3.10	4.12
RYE	MCPA SODIUM SALT	0.567	2.07	2.07
RYE	TORCH DS	0.253 - 0.304	4.68	5.62
SOYBEANS	AMIBEN + TREFLAN EC	3.74 + 0.61-0.809	31.57	33.52
SOYBEANS	BASAGRAN	0.71 - 0.91	14.65	18.78
SOYBEANS	EDGE	0.65 - 0.89	9.72	13.31
SOYBEANS	FUSILADE A (V CORN)	0.243	10.24	10.24
SOYBEANS	FUSILADE B (V CER)	0.324	13.65	13.65
SOYBEANS	FUSILADE C (WLDOAT)	0.405	17.06	17.06
SOYBEANS	FUSILADE D (FXTL)	0.57	24.01	24.01
SOYBEANS	FUSILADE E (QG)	0.81	34.12	34.12
SOYBEANS	HOE GRASS	1.42	17.61	17.61
SOYBEANS	POAST A (FXTL)	0.324	10.41	10.41
SOYBEANS	POAST B (WLDOAT)	0.57	18.22	18.22
SOYBEANS	POAST C (V WHT)	0.65	20.89	20.89
SOYBEANS	POAST D (V BLY)	0.77	24.75	24.75
SOYBEANS	POAST E (QG)	1.78	47.69	47.69
SOYBEANS	POAST PPACK (ANNGR)	0.57	20.12	20.12
SOYBEANS	POAST PPACK (QG)	1.1	37.15	37.15
SOYBEANS	TREFLAN EC	0.61-1.05	6.10	10.50
SUNFLOWERS	AMIBEN + TREFLAN EC	3.74 + 0.61-0.809	31.57	33.52
SUNFLOWERS	CARBYNE	0.6-0.7	6.95	8.11
SUNFLOWERS	EDGE	0.65 - 0.89	9.72	13.31
SUNFLOWERS	ERTAN 8-E	1.72	16.32	16.32
SUNFLOWERS	EXCEL	1.01	15.76	15.76
SUNFLOWERS	FUSILADE A (V CORN)	0.243	10.24	10.24
SUNFLOWERS	FUSILADE B (V CER)	0.324	13.65	13.65
SUNFLOWERS	FUSILADE C (WLDOAT)	0.405	17.06	17.06
SUNFLOWERS	FUSILADE D (FXTL)	0.57	24.01	24.01
SUNFLOWERS	FUSILADE E (QG)	0.81	34.12	34.12
SUNFLOWERS	HOE GRASS	1.01	12.52	12.52
SUNFLOWERS	MATAVEN	2.02-2.63	13.21	17.20
SUNFLOWERS	RIVAL	0.65-1.1	6.14	10.38
SUNFLOWERS	TREFLAN EC	0.61-1.05	6.10	10.50

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
SUNFLOWERS	TREFLAN QR 5 (FALL)	8.90-13.8	10.06	15.59
SUNFLOWERS	TREFLAN QR 5 (SPRING)	6.9-11.3	7.80	12.77
SUNFLOWERS	TRIFLUREX	0.81 - 1.1	6.12	8.31
TRITICALE	AVENGE 200-C	1.42-1.72	12.64	15.31
TRITICALE	HOE GRASS	1.01	12.52	12.52
TRITICALE	MATAVEN	2.02	13.21	13.21
TRITICALE	TORCH DS	0.253-0.304	4.68	5.62
TT CANOLA	AVADEX BW	1.72-2.23	14.09	18.26
TT CANOLA	AVADEX BW GRANULAR	5.7 - 8.9	14.59	22.78
TT CANOLA	BAR-FOX	1.81	9.92	9.92
TT CANOLA	BLADEX TTC	1.21	10.44	10.44
TT CANOLA	CARBYNE	0.6-0.7	6.95	8.11
TT CANOLA	DALAPON	0.445-0.71	2.24	3.58
TT CANOLA	EXCEL + BLADEX L	0.91 + 1.21	24.64	24.64
TT CANOLA	EXCEL + LONTREL	0.91 + 0.3	31.90	31.90
TT CANOLA	FORTRESS	5.67 - 6.88	14.23	17.27
TT CANOLA	FUSILADE + BLADEX L	0.243-0.405 + 1.21	20.68	27.50
TT CANOLA	FUSILADE + LONTREL	0.243-0.405 + 0.3-0.6	27.94	52.46
TT CANOLA	FUSILADE A (V CORN)	0.243	10.24	10.24
TT CANOLA	FUSILADE B (V CER)	0.324	13.65	13.65
TT CANOLA	FUSILADE C (WLDOAT)	0.405	17.06	17.06
TT CANOLA	FUSILADE D (QG SPRSW)	0.405	17.06	17.06
TT CANOLA	HOE GRASS	1.01	12.52	12.52
TT CANOLA	HOE GRASS + LONTREL	1.13 + 0.3	31.71	31.71
TT CANOLA	LONTREL	0.3 - 0.61	17.70	35.99
TT CANOLA	MATA TCA	1.81	10.14	10.14
TT CANOLA	POAST + BLADEX TTC	0.324-0.77 + 1.21	20.85	35.19
TT CANOLA	POAST A (FXTL)	0.324	10.41	10.41
TT CANOLA	POAST B (WLDOAT)	0.57	18.32	18.32
TT CANOLA	POAST C (V WHT)	0.65	20.89	20.89
TT CANOLA	POAST D (V BLY)	0.77	24.75	24.75
TT CANOLA	POAST PPACK (ANNGR)	0.57	20.12	20.12
TT CANOLA	RIVAL	0.65-1.1	6.14	10.38
TT CANOLA	SENCOR 75 DF	0.111	7.47	7.47
TT CANOLA	SENCOR 75DF + TREFLAN EC	0.111-0.223 + 0.61 - 1.1	13.57	26.01
TT CANOLA	TCA SOLUTION	2.25-3.64	9.52	15.40
TT CANOLA	TREFLAN EC	0.61-1.05	6.10	10.50
TT CANOLA	TREFLAN QR 5 (FALL)	8.9 - 13.8	10.06	15.59
TT CANOLA	TREFLAN QR 5 (SPRING)	6.9-11.3	7.80	12.77
WHEAT	2,4-D AMINE	0.506-0.688	1.85	2.51
WHEAT	2,4-D AMINE	0.340	1.24	1.24
WHEAT	2,4-D LV ESTER	0.506-0.688	2.76	3.75
WHEAT	2,4-D LV ESTER	0.340	1.85	1.85
WHEAT	APOLAN F + MCPA AMINE	0.19-0.251 + 0.445	5.69	6.91
WHEAT	ASSERT	0.53 - 0.65	13.55	16.61
WHEAT	ASSERT + 2,4-D LV ESTER	0.65 + 0.23	17.86	17.86
WHEAT	ASSERT + MCPA ESTER	0.65 + 0.45	19.11	19.11
WHEAT	AVADEX BW	1.21 - 1.72	9.91	14.09
WHEAT	AVADEX BW + RIVAL	1.21-1.72 + 0.49-0.65	14.54	20.23
WHEAT	AVADEX BW + TREFLAN EC	1.21-1.72 + 0.45-0.61	14.41	20.19

CROP	CHEMICAL	RATE(L/ACRE)	LOW COST	HIGHCOST
WHEAT	AVADEX BW GRANULAR	4.45 - 6.87	11.39	17.69
WHEAT	AVENGE 200+DIPHENOPROP	1.42-1.72 + 0.71	17.86	20.53
WHEAT	AVENGE 200-C	1.42-1.72	12.64	15.31
WHEAT	AVENGE 200-C + 24-D LV ES	1.42-1.72 + 0.51-0.69	15.42	19.07
WHEAT	AVENGE 200-C + BUCTRIL M	1.42-1.72 + 0.405	14.61	16.70
WHEAT	AVENGE 200-C + ESTAPROP	1.42-1.72 + 0.71	17.88	20.55
WHEAT	AVENGE 200-C + MCPA ESTER	1.42-1.72 + 0.51-0.69	15.42	19.07
WHEAT	AVENGE 200-C + SABRE	1.42-1.72 + 0.316	16.68	19.35
WHEAT	AVENGE 200-C + TORCH DS	1.42-1.72 + 0.253-0.304	17.32	20.93
WHEAT	BANVEL + 2,4-D AMINE	0.093 - 0.117 + 0.344	3.68	4.30
WHEAT	BANVEL + MCPA AMINE	0.093 - 0.117 + 0.344	3.88	4.50
WHEAT	BANVEL + MCPA SODIUM SALT	0.093 - 0.117 + 0.567	4.49	5.11
WHEAT	BANVEL + MCPAK	0.093 - 0.117 + 0.405	4.09	4.71
WHEAT	BLAGAL	0.91	6.51	6.51
WHEAT	BUCTRIL M	0.405	4.04	4.04
WHEAT	CARDYNE	0.6-0.7	6.95	8.11
WHEAT	DIPHENOPROP 600	0.71	5.22	5.22
WHEAT	DYVEL	0.506	4.43	4.43
WHEAT	ESTAPROP	0.71	5.24	5.24
WHEAT	FORTRESS	4.45 - 5.67	11.17	14.23
WHEAT	HOE GRASS	1.01	12.52	12.52
WHEAT	HOE GRASS + TORCH DS	1.13 + 0.253	18.69	18.69
WHEAT	HOE GRASS II	1.42	16.90	16.90
WHEAT	HOE GRASS+REFINE(WO ONLY)	1.13 + 0.008	17.53	17.53
WHEAT	KIL-MOR	0.344-0.445	2.89	3.74
WHEAT	LEXONE DF	0.109	7.32	7.32
WHEAT	LEXONE DF + BANVEL	0.109 + 0.093	9.74	9.74
WHEAT	LEXONE DF + MCPA AMINE	0.109 + 0.340-0.453	8.76	9.25
WHEAT	LOROX L + MCPA AMINE	0.172-0.223 + 0.340-0.453	5.46	7.15
WHEAT	MATAVEN	2.02	13.21	13.21
WHEAT	MCPA AMINE	0.51 - 0.69	2.17	2.93
WHEAT	MCPA AMINE	0.340	1.44	1.44
WHEAT	MCPA ESTER	0.51 - 0.69	2.83	3.83
WHEAT	MCPA ESTER	0.340	1.89	1.89
WHEAT	MCPA SODIUM SALT	0.85-1.13	3.10	4.12
WHEAT	MCPA SODIUM SALT	0.567	2.07	2.07
WHEAT	MCPAK	0.85	3.50	3.50
WHEAT	REFINE	0.008	3.52	3.52
WHEAT	REFINE + MCPA AMINE 500	0.008 + 0.405	5.24	5.24
WHEAT	SENCOR 75 DF + MCPA AMINE	0.111 + 0.34-0.45	8.91	9.38
WHEAT	SENCOR 75 DF + 2,4-DAMINE	0.111 + 0.34-0.453	8.71	9.12
WHEAT	TREFLAN EC	0.45-0.61	4.50	6.10
WHEAT	TRIFLURX	0.57 - 0.85	4.30	6.42
WHEAT	TARGET	0.405-0.61	3.26	4.92
WHEAT	SENCOR 75 DF + BANVEL	0.111 + 0.093	9.89	9.89
WHEAT	SENCOR 75 DF	0.111	7.47	7.47
WHEAT	STAMPEDE 360 + 2,4-D EST	1.11 + 0.324-0.486	10.33	11.21
WHEAT	STAMPEDE 360 +MCPA ESTER	1.11 + 0.223	9.80	9.80
WHEAT	STAMPEDE CM	1.11	9.39	9.39
WHEAT	TORCH DS +2,4-D LV ESTER	0.253 + 0.227-0.34	5.92	6.53
WHEAT	TORCH DS +MCPA ESTER	0.253 + 0.227-0.34	5.94	6.57
WHEAT	TORCH DS	0.253-0.304	4.68	5.62
			0.00	0.00